Activity: Igneous Rocks Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Enquiry standards:

3.1 Record raw data appropriately in a manner that allows easy interpretation

3.2 Process raw data by the most appropriate means

3.3 Draw valid conclusions, allowing for errors and uncertainties

**Supporting information:**

Igneous rocks are formed from magma. Crystals form when magma cools. The longer it takes to cool, the larger the crystals grow. Rocks which contain **crystals that are visible** to the naked eye are called **granular** rock. We say they have a **phaneritic texture**.

When magma erupts as lava it cools rapidly and the **crystals seldom reach visible size**. We say these rocks are **microcrystalline**, and have an **aphanitic texture**.

Igneous rocks can be classified according to their texture (i.e. depending on crystal size), and by the proportion of light and dark minerals in the rock.

Table 7.2 shows these minerals on the classification chart.



**Instructions:**

Use the tables provided to classify the four igneous rock samples. **Write observations** about these rock samples using some of the key terms in the tables.

|  |  |  |
| --- | --- | --- |
| Rock sample | Observations | Conclusion |
| 2 |  |  |
| 3 |  |  |
| 7 |  |  |
| 9 |  |  |